

REMARKS

Claims 1, 3, 9 and 10 are currently pending. Claims 1 and 3 are amended herein, and claim 2 has been canceled without prejudice. Claims 9 and 10 are newly presented for examination. Support for the amendments made to claim 1 is found throughout the Specification and Drawings as filed, for example at page 1 in claim 1 and Figure 1. Support for the Amendment to claim 3 is found, for example, in the Specification (9/30/02) at page 14, paragraph 4. Support for claims 9 and 10 is found in the Specification (9/30/02) at page 15, lines 3-8. No new matter has been added. Please see Appendix I for a marked-up version of the amended claims. Applicant respectfully requests reconsideration of the above-identified application in view of the above amendments and the following remarks.

Objections to the Drawings

1. The drawings were objected to for allegedly not showing every feature of the invention recited in the claims. Specifically, the Examiner points to various possible combinations of relative gap sizes as not being shown in the drawings. The Examiner required that the drawings be amended or this feature be canceled from the claims.

Applicant has amended claim 1 to recite, *inter alia*, a fuel injector...

wherein a gap formed between an outer circumference of the third cylindrical member and an inner circumference of the tubular sleeve portion, is smaller than a gap formed between an outer circumference of the first, second or fourth cylindrical members and the inner circumference of the tubular sleeve portion.

Claim 1, as amended, recites that the *third* cylindrical member comprises a relatively smaller gap between itself and the sleeve body, as compared with the first, second or fourth cylindrical

members. Support for the amendment to this claim is found throughout the Specification and drawings as filed, for example at page 14, lines 7-16 (9/30/03). Amended claim 1 is additionally supported by Figure 1, as amended on September 30, 2002.

Claim Rejections Under 35 U.S.C. §112

2. Claims 1-3 were rejected under 35 U.S.C. §112, first paragraph, as allegedly not providing enablement for a smaller gap between cylindrical members 15 and 16 and the straight portion, as compared with that of the other cylindrical members and the straight portion. Applicant respectfully traverses this rejection.

As mentioned above, Applicant has amended claim 1 to recite, *inter alia*, that the *third* cylindrical member comprises a relatively smaller gap between itself and the sleeve body, as compared with the first, second or fourth cylindrical members.

Applicant believes that claim 1, as amended, satisfies the requirements of 35 U.S.C. §112 for reciting subject matter that is enabled by the Specification. Claim 3 depends from claim 1 and was presumably rejected for being dependent upon a rejected base claim. Therefore, Applicant respectfully requests for this rejection of claims 1 and 3 under 35 U.S.C. §112 to be withdrawn.

3. Claims 1-3 were rejected under 35 U.S.C. §112, first paragraph, for allegedly not being provided enablement for an “indefinite” number of cylinders. See Final Office Action at page 3, last paragraph. Applicant respectfully traverses this rejection.

Applicant has amended claim 1 to recite, *inter alia*, first, second, third and fourth cylindrical members. Moreover, the recitation “at least one” has been eliminated from the claim.

Applicant believes that claim 1, as amended, satisfies the requirements of 35 U.S.C. §112 for reciting subject matter that is enabled by the Specification. Claim 3 depends from claim 1 and was presumably rejected for being dependent upon a rejected base claim. Therefore, Applicant respectfully requests for this rejection of claims 1 and 3 under 35 U.S.C. §112 to be withdrawn.

4. Claims 1-3 were rejected under 35 U.S.C. §112, first paragraph, for allegedly not providing enablement for a nozzle body constructed of an “indefinite” number of cylindrical members. Applicants respectfully traverse this rejection.

As mentioned above, claim 1 has been amended to recite, *inter alia*, “a nozzle body having ... first, second and third cylindrical members....” Moreover, the recitation “the nozzle body has a plurality of cylindrical members” has been eliminated.

Applicant believes that claim 1, as amended, satisfies the requirements of 35 U.S.C. §112 for reciting subject matter that is enabled by the Specification. Claim 3 depends from claim 1 and was presumably rejected for being dependent upon a rejected base claim. Therefore, Applicant respectfully requests for this rejection of claims 1 and 3 under 35 U.S.C. §112 to be withdrawn.

5. Claims 1-3 were rejected under 35 U.S.C. §112, second paragraph, for claim 1 allegedly being indefinite for including “a cylindrical member” in two instances. Applicants respectfully traverse this rejection.

Claim 1 has been amended to no longer twice recite “a cylindrical member,” as may be seen in the above amendments.

Applicant believes that claim 1, as amended, satisfies the requirements of 35 U.S.C. §112, second paragraph. Claim 3 depends from claim 1 and was presumably rejected for being dependent upon a rejected base claim. Therefore, Applicant respectfully requests for this rejection of claims 1 and 3 under 35 U.S.C. §112 to be withdrawn.

CONCLUSION

For the above reasons, it is believed that all claims, as presently presented, are patentable, and that this application is in allowable condition.

Respectfully submitted,
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APPENDIX I - Marked-up Version of Amendments

Please amend claims 1 and 3 as follows:

1. (Twice Amended) A fuel injector comprising:

[a nozzle body having a needle valve therein for opening and closing an injection port, the nozzle body being constructed of a cylindrical member serving as a separating plate and a cylindrical member provided on the injection port side of the separating plate;

a cylinder constructed of at least one cylindrical member so as to contain therein a plunger for pressurizing fuel; and

a sleeve body containing the nozzle body and the cylinder,

wherein the sleeve body has a straight portion having a constant inner diameter for containing the nozzle body,

wherein the nozzle body has a plurality of cylindrical members, each of the cylindrical members has a constant outer diameter and is encompassed by the straight portion of the sleeve body, and]

a nozzle body having a needle valve for opening and closing an injection port, and
a tubular sleeve portion having a straight portion with a constant inner diameter;

a first cylindrical member disposed within said tubular sleeve portion;

a second cylindrical member disposed within said tubular sleeve portion, said
second cylindrical member is adjacent to said first cylindrical member;

a third cylindrical member disposed within said tubular sleeve portion, wherein
said second cylindrical member abuts and is on an injection port side of said third cylindrical
member and said third cylindrical member is a separating plate;

a fourth cylindrical member disposed within said tubular sleeve portion, said fourth cylindrical member contains therein at least a portion of a plunger for pressurizing fuel;
and

wherein a gap formed between an outer circumference of [one of the plurality of cylindrical members] the third cylindrical member and an inner circumference of the [straight] tubular sleeve portion, is smaller than a gap formed between an outer circumference of the [others of the plurality of the] first, second or fourth cylindrical members and the inner circumference of the [straight] tubular sleeve portion.

3. (Twice Amended) A fuel injector according to claim 1, wherein cutaways are formed in an outer circumference of said [one of the plurality of] third cylindrical [members] member.

Please cancel claim 2 without prejudice and add claims 9 and 10 as follows:

--9. (New) The fuel injector of claim 1, wherein the second and third cylindrical members are formed as one piece.--

--10. (New) The fuel injector of claim 1, wherein the third and fourth cylindrical members are formed as one piece.--